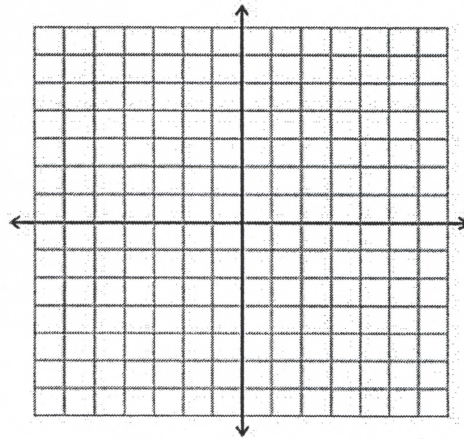


Graph using Axis of Symmetry (AoS) and Vertex:

$$y = x^2 + 6x + 8$$



Now we will finally SOLVE some Quadratic Functions!!!

Solutions are found at the \_\_\_\_\_ of the graph. (Where the graph crosses, or touches, the x-axis!)

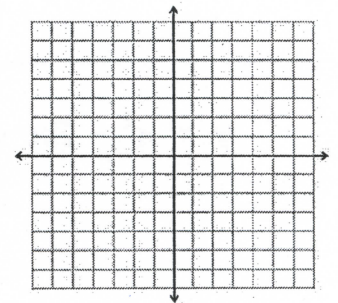
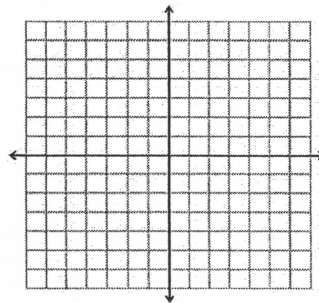
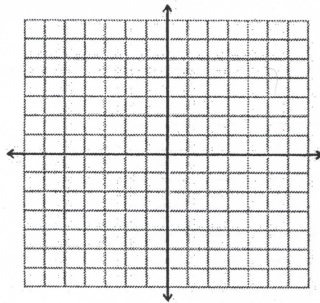
What are the solutions of the function above?  $x =$  \_\_\_\_\_ OR  $x =$  \_\_\_\_\_

**SOLUTIONS****ZEROS****ROOTS****X-INTERCEPTS**

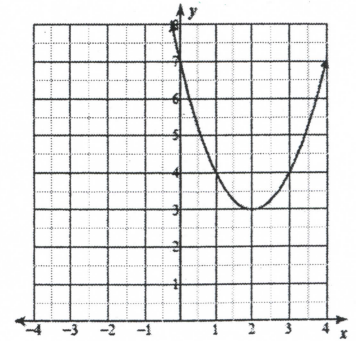
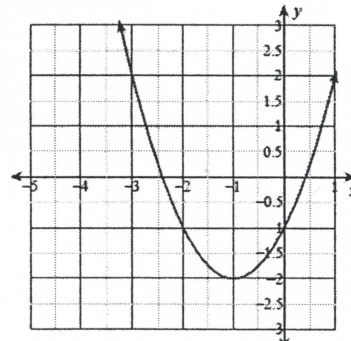
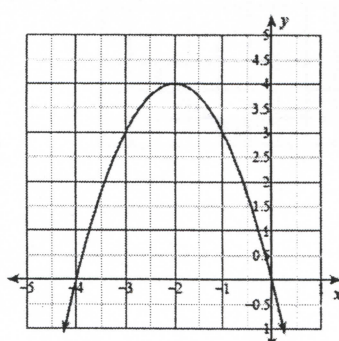
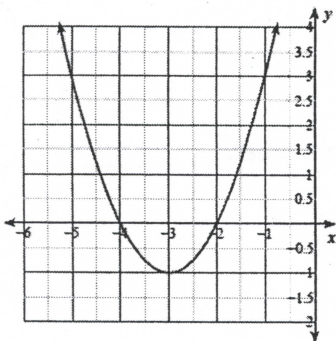
< - - - - - All the same thing!!! - - - - - >

How many Solutions/Zeros/Roots/X-Intercepts could there be???

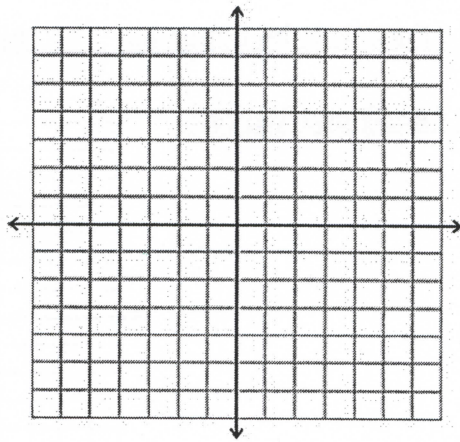
There could be... \_\_\_\_\_ solutions OR \_\_\_\_\_ solutions OR \_\_\_\_\_ solutions.



Find the solutions of each graphed quadratic function:

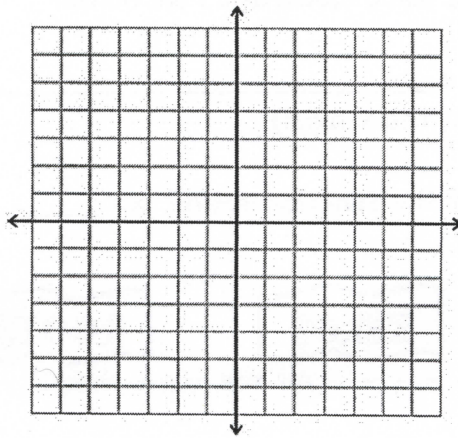


$$y = 3 - x^2 + 2x$$



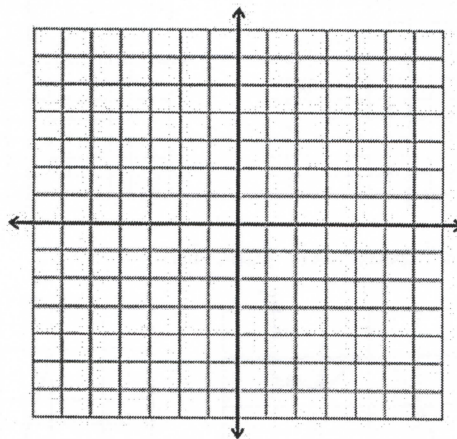
Solutions: \_\_\_\_\_

$$y = 2x^2 - 8$$



Solutions: \_\_\_\_\_

$$y = x^2 - 2x + 2$$



Solutions: \_\_\_\_\_